

## Indiana Irrigators: Voluntary Conservation and Efficiency Efforts— Suggested Best Management Practices Checklist

The Indiana Department of Natural Resources has compiled the following suggested Best Management Practices (BMPs) to provide assistance to Indiana Significant Water Withdrawal Facilities (SWWF) in the development of water conservation & efficiency efforts under the provisions of the Great Lakes-St Lawrence River Basin Compact (IC 14-25-15-5). Pursuant to this legislation, conservation and efficiency efforts are voluntary in nature for existing SWWF facilities in the Great Lakes Basin; however, Indiana is promoting voluntary conservation and efficiency efforts at all facilities throughout the State. This voluntary checklist is being provided to each registered SWWF in Indiana according to their water use category. The checklist contains examples of BMPs that might be considered by a facility. This list is intended as a guide and should not be considered complete or mandatory, as no one set of BMPs would be appropriate for or applicable to, all facilities.

### Selection of Best Management Practices for Conservation and Efficiency Efforts:

C u r r e n t	P l a n n e d	<p><b>Please check those items that are <i>currently</i> being utilized by the facility, and those that may be <i>planned</i> or implemented over the next water use reporting year. Do not check either box if the item is not applicable to your facility or organization.</b></p> <p><b><u>Please return this checklist with your annual water use report.</u></b></p>
<input type="checkbox"/>	<input type="checkbox"/>	Develop a system wide (pivot, pump, water supply) maintenance program to reduce in season shut downs, improve water distribution, and enhance overall conservation objectives.
<input type="checkbox"/>	<input type="checkbox"/>	Implement leak detection and repair program to mitigate water losses.
<input type="checkbox"/>	<input type="checkbox"/>	Development of an accurate water measurement system; including mechanical metering, or by figuring water use by flow meters, acre inches applied, or pump capacity.
<input type="checkbox"/>	<input type="checkbox"/>	Monitor & track pumping plant efficiency by comparing total water pumped to total fuel or energy used over a season.
<input type="checkbox"/>	<input type="checkbox"/>	Operation of pumps to meet, but not exceed, application rates to reduce excessive pumping.
<input type="checkbox"/>	<input type="checkbox"/>	Match pump output to distribution equipment design parameters.
<input type="checkbox"/>	<input type="checkbox"/>	Track seasonal crop water use, seasonal adjustments, etc.
<input type="checkbox"/>	<input type="checkbox"/>	Design & manage distribution system to utilize application rates that allow irrigation water to infiltrate the soil and minimize run-off.
<input type="checkbox"/>	<input type="checkbox"/>	Develop soil management practices that measure and monitor soil moisture content to minimize run-off and increase water and nutrient uptake.
<input type="checkbox"/>	<input type="checkbox"/>	Allow for sufficient soil storage capacity to reduce run off in the event rainfall follows irrigation.

<input type="checkbox"/>	<input type="checkbox"/>	Irrigate according to your crop's needs by tracking allowable soil or substrate moisture depletion at each stage in development.
<input type="checkbox"/>	<input type="checkbox"/>	Know the depth of rooting for each crop irrigated.
<input type="checkbox"/>	<input type="checkbox"/>	Monitor drought and water stress conditions regionally.
<input type="checkbox"/>	<input type="checkbox"/>	Utilize low pressure or low volume irrigation techniques with more efficient application practices.
<input type="checkbox"/>	<input type="checkbox"/>	Incorporate water conservation policies and procedures into employee training programs.
<input type="checkbox"/>	<input type="checkbox"/>	Participate in water conservation advisory group or organization to raise awareness.
<input type="checkbox"/>	<input type="checkbox"/>	Other [please specify]: <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

**Evaluation and Modification of Voluntary Conservation and Efficiency Efforts**

Upon adoption of applicable voluntary Best Management Practices (BMPs), the facility may consider evaluating and updating their goals and objectives on a periodic basis. Modifications to chosen BMPs may be based upon an evaluation of previously selected goals and objectives and any new relevant information or changes in water use processes.

The facility could consider documenting the following information to evaluate their voluntary selection of conservation and efficiency goals and the BMPs to reach them:

- A list of dates and descriptions of BMPs chosen as well as conservation & efficiency measures implemented
- Means used to quantify water savings
- Approximate amounts of water saved for each measure implemented
- Discussion about whether or not the goals of the plan have been met
- If objectives were not met, an analysis of why the objectives were not met and a discussion of revisions to goals & objectives and the chosen BMPs may be helpful for the facility to meet their voluntary objectives in the future.

Have questions, comments, or need further assistance?

Please contact the Indiana Department of Natural Resources, Division of Water at 317-232-4160 or toll free 877-928-3755 (choose option 4); or see our website at: [www.in.gov/dnr/water](http://www.in.gov/dnr/water).

**Mail your completed checklist to:**

Division of Water  
Indiana Department of Natural Resources  
402 W. Washington St Room: W264  
Indianapolis, IN 46204-2641

**Facility Registration Information:**